Chris Weis
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To: Joyce Ackerman/EPR/R8/USEPA/US@.
cc:
Subject: o-chlorobenzaldehyde

HSDB Chorobenzaldehyde:

TOXICITY EXCERPTS

Non-Human Toxicity Excerpts:

FORTY-TWO COMPOUNDS IDENTIFIED IN PULP AND PAPER MILL EFFLUENT WERE SCREENED FOR
GENETIC ACTIVITY IN GROWING YEAST CELLS USING STRAINS D7 AND XVI85-14C WITHOUT S9
MICROSOMAL FRACTION. O-CHLOROBENZALDEHYDE SHOWED NEGATIVE RESPONSES IN YEAST.

PHARMACOKINETICS

Metabolism/Metabolites:
1.MAIN METABOLIC PATHWAYS OF O-CHLOROBENZYLIDENE MALONONITRILE (CS) IN RABBITS WERE EST
QUANTITATIVELY FOLLOWING IV ADMIN. THE PRODUCTS OF HYDROLYSIS WERE O-CHLOROBENZALDEHYDE
(O-CBALD) & MALONONITRILE. THE TOXIC ACTIONS OF CS CAN BE ASCRIBED TO O-CBALD.
2.MALE ADULT RATS DOSED IP WITH O-SUBSTITUTED BENZALDEHYDES EXCRETED MERCAPTURIC ACIDS IN
THEIR URINE. THE TOTAL MERCAPTURIC ACID EXCRETION AS % DOSE WAS 6.8 FOR O-CHLOROBENZALDEHYDE.

Biological Half-Life:

IN CAT BLOOD IN VIVO, O-CHLOROBENZALDEHYDE HAD /A/ HALF /LIFE/ OF...9.5 SEC.

POLLUTION SOURCES

Artificial Sources:

A SIMPLE, EFFECTIVE CHEM DISPOSAL METHOD FOR O-CHLOROBENZALMALONONITRILE (CS) WAS
DEVELOPED. THE RECOMMENDED REACTION IS AQ ALKALINE HYDROLYSIS OF CS TO
O-CHLOROBENZALDEHYDE. IN THE SYSTEM DEVELOPED, THE REACTION GOES RAPIDLY TO GIVE EASILY
SEPARATED, HIGH-PURITY O-CHLOROBENZALDEHYDE WITH YIELDS OF 70-75%.